

CLAIMS:

1. An ultrasonic probe for examining a specimen,  
comprising:

5 a holding portion including a first housing  
portion;

an insertion member configured to move along the  
first housing portion, the insertion member having at  
least one end for insertion into an endocavity of the  
specimen; and

10 an ultrasonic generator provided at the one end  
of the insertion member and configured to transmit an  
ultrasound pulse to the specimen and collect an echo  
signal resulting from the transmitted ultrasound pulse.

15 2. The ultrasonic probe according to claim 1,  
wherein the insertion member moves through the first  
housing portion.

20 3. The ultrasonic probe according to claim 1,  
wherein the first housing portion includes an insertion  
member stopping portion configured to prevent the  
insertion member from moving through the holding  
portion.

25 4. The ultrasonic probe according to claim 1,  
further comprising a first fixer disposed at the holding

portion, the first fixer being configured to keep the insertion member and the holding portion at a predetermined position relative to each other.

5           5. The ultrasonic probe according to claim 4, wherein the insertion member includes a plurality of first projections around a surface of the insertion member along a longitudinal direction of the insertion member and the holding portion includes a second  
10 projection configured to engage one of the plurality of first projections, and wherein the first fixer keeps the engagement.

          6. The ultrasonic probe according to claim 1,  
15 wherein the insertion member includes a relay member having a second housing portion and an insertion end member having the one end, the relay member being configured to move along the first housing portion, the insertion end member being configured to move along the  
20 second housing portion.

          7. The ultrasonic probe according to claim 6, further comprising a first fixer disposed at the holding portion and a second fixer disposed at the relay member,  
25 the first fixer being configured to keep the relay member and the holding portion at a first predetermined position

relative to each other, the second fixer being configured to keep the insertion end member and the relay member at a second predetermined position relative to each other.

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8. The ultrasonic probe according to claim 6, wherein the first housing portion includes a relay member stopping portion configured to prevent the relay member from moving through the holding portion, and wherein  
10 the second housing portion includes an insertion end member stopping portion configured to prevent the insertion end member from moving through the relay member.

15 9. The ultrasonic probe according to claim 7, wherein the relay member includes a plurality of first projections around a surface of the relay member along a longitudinal direction of the relay member and the holding portion includes a second projection which is  
20 engaged with one of the plurality of first projections, and wherein the first fixer fixes the engagement.

10. The ultrasonic probe according to claim 7, wherein the insertion end member includes a plurality  
25 of first projections around a surface of the insertion end member along a longitudinal direction of the

insertion end member and the relay member includes a second projection which is engaged with one of the plurality of first projections, and wherein the second fixer fixes the engagement.

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11. An ultrasound imaging apparatus for obtaining and displaying an ultrasound image, the apparatus comprising:

an ultrasonic probe for examining a specimen,  
10 including:

a holding portion including a first housing portion;

an insertion member configured to move along the first housing portion, the insertion member having  
15 at least one end for insertion into an endocavity of the specimen; and

an ultrasonic generator provided at the one end of the insertion member and configured to transmit an ultrasound pulse to the specimen and collect an echo  
20 signal resulting from the transmitted ultrasound pulse; and

a display coupled to the ultrasonic probe and configured to display the ultrasound image based on the echo signal.

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12. A method of providing an ultrasound image,

comprising:

providing a holding portion having a housing portion;

providing an insertion member having a distal end  
5 and a proximal end, the distal end having an ultrasonic generator; and

slidably coupling the insertion member to the housing portion of the holding portion.

10 13. The method according to claim 12, wherein a position of the insertion member is adjustable, by the slidable coupling, relative to the holding portion.